Appl. No. 10/663,215 Amdt. dated December 15, 2003 Reply to Notice to File Missing Parts of December 9, 2003

## **REMARKS**

Claims 1-50 are pending in this application. Claims 23 and 29 have been amended by the current amendment. The amendments to claims 23 and 29 insert sequence identifiers in adherence with 37 C.F.R. §§1.821 to 1.825.

Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the above named sequences, SEQ ID NOS:1-23, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

The information contained in the computer readable disk was prepared through the use of the software program "PatentIn" and is identical to that of the paper copy. This amendment contains no new matter.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

Laurence J. Hyman

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LJH:dmw 60102023 v1

## SEQUENCE LISTING

DE 19700 CA

Sherman, Irwin
 Winograd, Enrique
 The Regents of the University of California

- <120> Peptides Which Generate Antibodies Resulting in Lysis of Pathologically Adherent Erythrocytes
- <130> 023070-140500US
- <140> US 10/663,215
- <141> 2003-09-15
- <160> 23
- <170> PatentIn Ver. 2.1
- <210> 1
- <211> 911
- <212> PRT
- <213> Homo sapiens
- <220×
- <223> human anion exchange protein 1 (AE1), band 3
   protein
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- Glu Pro Ala Ala His Asp Thr Glu Ala Thr Ala Thr Asp Tyr His Thr 35 40 45
- Thr Ser His Pro Gly Thr His Glu Val Tyr Val Glu Leu Gln Glu Leu 50 55 60
- Val Met Asp Glu Lys Asn Gln Glu Leu Arg Trp Met Glu Ala Ala Arg 65 70 75 80
- Trp Val Gln Leu Glu Glu Asn Leu Gly Glu Asn Gly Ala Trp Gly Arg 85 90 95
- Pro His Leu Ser His Leu Thr Phe Trp Ser Leu Leu Glu Leu Arg Arg
  100 105 110
- Val Phe Thr Lys Gly Thr Val Leu Leu Asp Leu Gln Glu Thr Ser Leu 115 120 125
- Ala Gly Val Ala Asn Gln Leu Leu Asp Arg Phe Ile Phe Glu Asp Gln 130 135 140
- Ile Arg Pro Gln Asp Arg Glu Glu Leu Leu Arg Ala Leu Leu Lys
- His Ser His Ala Gly Glu Leu Glu Ala Leu Gly Gly Val Lys Pro Ala 165 170 175

Val Leu Thr Arg Ser Gly Asp Pro Ser Gln Pro Leu Leu Pro Gln His 185 Ser Ser Leu Glu Thr Gln Leu Phe Cys Glu Gln Gly Asp Gly Gly Thr 200 Glu Gly His Ser Pro Ser Gly Ile Leu Glu Lys Ile Pro Pro Asp Ser Glu Ala Thr Leu Val Leu Val Gly Arg Ala Asp Phe Leu Glu Gln Pro Val Leu Gly Phe Val Arg Leu Gln Glu Ala Ala Glu Leu Glu Ala Val Glu Leu Pro Val Pro Ile Arg Phe Leu Phe Val Leu Leu Gly Pro Glu 265 Ala Pro His Ile Asp Tyr Thr Gln Leu Gly Arg Ala Ala Ala Thr Leu Met Ser Glu Arg Val Phe Arg Ile Asp Ala Tyr Met Ala Gln Ser Arg 295 Gly Glu Leu Leu His Ser Leu Glu Gly Phe Leu Asp Cys Ser Leu Val 315 Leu Pro Pro Thr Asp Ala Pro Ser Glu Gln Ala Leu Leu Ser Leu Val 330 Pro Val Gln Arg Glu Leu Leu Arg Arg Tyr Gln Ser Ser Pro Ala Lys Pro Asp Ser Ser Phe Tyr Lys Gly Leu Asp Leu Asn Gly Gly Pro Asp Asp Pro Leu Gln Gln Thr Gly Gln Leu Phe Gly Gly Leu Val Arg Asp Ile Arg Arg Arg Tyr Pro Tyr Tyr Leu Ser Asp Ile Thr Asp Ala 390 395 Phe Ser Pro Gln Val Leu Ala Ala Val Ile Phe Ile Tyr Phe Ala Ala 405 410 Leu Ser Pro Ala Ile Thr Phe Gly Gly Leu Leu Gly Glu Lys Thr Arg 425 Asn Gln Met Gly Val Ser Glu Leu Leu Ile Ser Thr Ala Val Gln Gly 440 435 Ile Leu Phe Ala Leu Leu Gly Ala Gln Pro Leu Leu Val Val Gly Phe 455 Ser Gly Pro Leu Leu Val Phe Glu Glu Ala Phe Phe Ser Phe Cys Glu 470 475 Thr Asn Gly Leu Glu Tyr Ile Val Gly Arg Val Trp Ile Gly Phe Trp 485 490

Leu Ile Leu Leu Val Val Leu Val Val Ala Phe Glu Gly Ser Phe Leu 505 Val Arg Phe Ile Ser Arg Tyr Thr Gln Glu Ile Phe Ser Phe Leu Ile 520 Ser Leu Ile Phe Ile Tyr Glu Thr Phe Ser Lys Leu Ile Lys Ile Phe 535 Gln Asp His Pro Leu Gln Lys Thr Tyr Asn Tyr Asn Val Leu Met Val 550 555 Pro Lys Pro Gln Gly Pro Leu Pro Asn Thr Ala Leu Leu Ser Leu Val 570 Leu Met Ala Gly Thr Phe Phe Phe Ala Met Met Leu Arg Lys Phe Lys 585 Asn Ser Ser Tyr Phe Pro Gly Lys Leu Arg Arg Val Ile Gly Asp Phe 600 Gly Val Pro Ile Ser Ile Leu Ile Met Val Leu Val Asp Phe Phe Ile 615 620 Gln Asp Thr Tyr Thr Gln Lys Leu Ser Val Pro Asp Gly Phe Lys Val Ser Asn Ser Ser Ala Arg Gly Trp Val Ile His Pro Leu Gly Leu Arg Ser Glu Phe Pro Ile Trp Met Met Phe Ala Ser Ala Leu Pro Ala Leu Leu Val Phe Ile Leu Ile Phe Leu Glu Ser Gln Ile Thr Thr Leu Ile 680 Val Ser Lys Pro Glu Arg Lys Met Val Lys Gly Ser Gly Phe His Leu 695 Asp Leu Leu Val Val Gly Met Gly Val Ala Ala Leu Phe Gly Met Pro Trp Leu Ser Ala Thr Thr Val Arg Ser Val Thr His Ala Asn 725 730 Ala Leu Thr Val Met Gly Lys Ala Ser Thr Pro Gly Ala Ala Gln Ile Gln Glu Val Lys Glu Gln Arg Ile Ser Gly Leu Leu Val Ala Val 760 Leu Val Gly Leu Ser Ile Leu Met Glu Pro Ile Leu Ser Arg Ile Pro Leu Ala Val Leu Phe Gly Ile Phe Leu Tyr Met Gly Val Thr Ser Leu 790 795 Ser Gly Ile Gln Leu Phe Asp Arg Ile Leu Leu Phe Lys Pro Pro 805 810 815

Lys Tyr His Pro Asp Val Pro Tyr Val Lys Arg Val Lys Thr Trp Arg 825 Met His Leu Phe Thr Gly Ile Gln Ile Ile Cys Leu Ala Val Leu Trp 840 Val Val Lys Ser Thr Pro Ala Ser Leu Ala Leu Pro Phe Val Leu Ile 855 Leu Thr Val Pro Leu Arg Arg Val Leu Leu Pro Leu Ile Phe Arg Asn 875 Val Glu Leu Gln Cys Leu Asp Ala Asp Asp Ala Lys Ala Thr Phe Asp Glu Glu Glu Gly Arg Asp Glu Tyr Asp Glu Val Ala Met Pro Val 905 <210> 2 <211> 2740 <212> DNA <213> Homo sapiens <220> <223> human anion exchange protein 1 (AE1), band 3 protein <400> 2 cqccatqqaq qaqctqcaqq atqattatqa aqacatqatq gaggagaatc tggagcagga 60 qqaatatqaa qacccaqaca tccccqaqtc ccaqatqqaq qaqccqqcaq ctcacgacac 120 cgaggcaaca gccacagact accacaccac atcacacccg ggtacccaca aggtctatgt 180 ggagctgcag gagctggtga tggacgaaaa gaaccaggag ctgagatgga tggaggcggc 240 qcqctqqqtq caactqqaqq aqaacctqqq qqaqaatqqq gcctggggcc gcccgcacct 300 ctctcacctc accttctqqa qcctcctaqa qctqcqtaqa qtcttcacca aqqqtactgt 360 tctcctagac ctgcaagaga cctccctggc tggagtggcc aaccaactgc tagacaggtt 420 tatctttgaa gaccagatcc ggcctcagga ccgagaggag ctgctccggg ccctgctgct 480 taaacacagc cacgctggag agctggaggc cctggggggt gtgaagcctg cagtcctgac 540 acgctctggg gatccttcac agcctctgct cccccaacac tcctcactgg agacacagct 600 cttctgtgag cagggagatg ggggcacaga agggcactca ccatctggaa ttctggaaaa 660 gattcccccg gattcagagg ccacgttggt gctagtgggc cgcgccgact tcctggagca 720 gccggtgctg ggcttcgtga ggctgcagga ggcagcggag ctggaggcgg tggagctgcc 780 ggtgcctata cgcttcctct ttgtgttgct gggacctgag gccccccaca tcgattacac 840 ccagcttggc cgggctgctg ccaccctcat gtcagagagg gtgttccgca tagatgccta 900 catggctcag agccgagggg agctgctgca ctccctagag ggcttcctgg actgcagcct 960 agtqctqcct cccaccgatg cccctccga gcaggcactg ctcagtctgg tgcctgtgca 1020 gagggagcta cttcgaaggc gctatcagtc cagccctgcc aagccagact ccagcttcta 1080 caagggccta gacttaaatg ggggcccaga tgaccctctg cagcagacag gccagctctt 1140 cgggggcctg gtgcgtgata tccggcgccg ctacccctat tacctgagtg acatcacaga 1200 tgcattcagc ccccaggtcc tggctgccgt catcttcatc tactttgctg cactgtcacc 1260 cgccatcacc ttcggcggcc tcctgggaga aaagacccgg aaccagatgg gagtgtcgga 1320 gctgctgatc tccactgcag tgcagggcat tctcttcgcc ctgctggggg ctcagcccct 1380 gcttgtggtc ggcttctcag gacccctgct ggtgtttgag gaagccttct tctcgttctg 1440 cgagaccaac ggtctagagt acatcgtggg ccgcgtgtgg atcggcttct ggctcatcct 1500 gctggtggtg ttggtggtgg ccttcgaggg tagcttcctg gtccgcttca tctcccgcta 1560 tacccaggag atcitetect tecteattte ceteatette atetatgaga etttetecaa 1620 gctgatcaag atcttccagg accacccact acagaagact tataactaca acgtgttgat 1680 ggtgcccaaa cctcagggcc ccctgcccaa cacagccctc ctctcccttg tgctcatggc 1740 cggtaccttc ttctttgcca tgatgctgcg caagttcaag aacagctcct atttccctgg 1800 caagetgegt egggteateg gggaettegg ggteeceate tecateetga teatggteet 1860 ggtggatttc ttcattcagg atacctacac ccagaaactc tcggtgcctg atggcttcaa 1920

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residues on either side of predicted alpha-helix

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